Louisville Metro Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137

# Title V Operating Permit

Permit No.: O-0015-22-V Plant ID: 0015

Effective Date: XX/XX/2022 Expiration Date: XX/XX/2027

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

**Source:** **LLFlex, LLC**
**1225 W. Burnett Avenue**
**Louisville, KY 40210**

**Owner:** **CLP LLFlex Holdings, LLC**
**60 East 42nd Street, Suite 1400**
**New York, NY 10165**

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen months and no later than six months prior to the expiration date.

Application No.: See **Application and Related Documents** table.

Administratively Complete Date: 12/02/2021
Public Notice Date: 05/21/2022
Proposed Permit Date: 05/21/2022

Permit writer: Aaron DeWitt

Air Pollution Control Officer
Xx/xx/2022

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## Permit Revisions and Changes

| Permit No. | Public Notice Date | Issue Date | Change Type | Description/Scope |
|---|---|---|---|---|
| 148-97-TV | 12/10/2000 | 09/28/2001 | Initial | Initial Permit Issuance |
| 148-97-TV (R1) | N/A | 11/05/2002 | Renewal | Administrative change to correct a typo |
| 148-97-TV (R2) | 10/29/2011 | 12/15/2011 | Renewal | Significant Changes; Name and Responsible Official Change; Correct the applicable boiler regulation from 6.07 to 7.06; Incorporate CAM Plan |
| 148-97-TV (R3) | 02/17/2012 | 03/20/2012 | Admin | Ownership/Name Change; see Administrative Change Document for list of corrections. |
| 148-97-TV (R4) | N/A | 09/21/2015 | Admin | Incorporate Construction Permit C-0015-1001-15-V; add coating station to Laminator #10, add solvent coating to Laminator #14, and install new catalytic oxidizer for Laminator #14. Plantwide 250 tpy PSD avoidance limit added. |
| O-0015-17-V | 03/05/2017; 04/13/2017 | 05/30/2017 | Renewal | Boiler #2 (E-14) permanently disabled and stack removed. Boiler E-14 was removed by 7/26/2016. Thermal Oxidizer (C-1) was disabled by 2/3/17. E-16 & E-16a added. 40.689 tpy limit removed from LAM #6. |
| O-0015-17-V (R1) | N/A | 01/22/2018 | Admin | Administrative change to include SIP Bubble limit and other changes from construction permit 103-74-C(R2) |
| O-0015-17-V (R2) | 07/15/2021 | 09/20/2021 | Sig. | Incorporation of ABO 11/18/2020. Designation as area source of HAP through incorporation of permittee requested source-wide HAP limits (Single HAP < 10 tpy, Total HAP < 25 tpy) to preclude applicability of 40 CFR 63 Subpart KK and 40 CFR 63 Subpart DDDDD. |

| Permit No. | Public Notice Date | Issue Date | Change Type | Description/Scope |
|---|---|---|---|---|
| O-0015-22-V | 05/21/2022 | | Renewal | Standard renewal. Removed Boiler #1 (E-15), replaced with IA Boiler (E-24). |

## Construction Permit Summary

| Permit No. | Issue Date | Description |
|---|---|---|
| 103-74-C (R2) | 12/19/2017 | Added VOC SIP bubble limits to laminators #6, #7, #8, #9, #10, #11 & #14, and Coater #15. |

## Application and Related Documents

| Document Number | Date | Description |
|---|---|---|
| 178517 | 12/01/2020 | Reminder email that renewal application due 12/31/2021 |
| 287033 | 11/30/2021 | TV Renewal Application |
| 287230 | 11/30/2021 | Email with TV Renewal Application |
| 287788 | 12/02/2021 | Application complete letter |
| 328984 | 4/05/2022 | Company copy of pre-draft permit for review |
| 341281 | 5/11/2022 | Company comments on pre-draft permit |

## Abbreviations and Acronyms

AP-42 - AP-42**,** *Compilation of Air Pollutant Emission Factors, published by U.S.EPA*
APCD - Louisville Metro Air Pollution Control District
BAC - Benchmark Ambient Concentration
BACT - Best Available Control Technology
Btu - British thermal unit
CEMS - Continuous Emission Monitoring System
CFR - Code of Federal Regulations
CO - Carbon monoxide
District - Louisville Metro Air Pollution Control District
EA - Environmental Acceptability
gal - U.S. fluid gallons
GHG - Greenhouse Gas
HAP - Hazardous Air Pollutant
Hg - Mercury
hr - Hour
in. - Inches
lbs - Pounds
l - Liter
LMAPCD - Louisville Metro Air Pollution Control District
mmHg - Millimeters of mercury column height
MM - Million
(M)SDS - (Material) Safety Data Sheet
NAICS - North American Industry Classification System
$NO_x$ - Nitrogen oxides
PM - Particulate Matter
$PM_{10}$ - Particulate Matter less than 10 microns
$PM_{2.5}$ - Particulate Matter less than 2.5 microns
ppm - parts per million
PSD - Prevention of Significant Deterioration
psia - Pounds per square inch absolute
QA - Quality Assurance
RACT - Reasonably Available Control Technology
SIC - Standard Industrial Classification
SIP - State Implementation Plan
$SO_2$ - Sulfur dioxide
STAR - Strategic Toxic Air Reduction
TAC - Toxic Air Contaminant
UTM - Universal Transverse Mercator
VOC - Volatile Organic Compound
w.c. - Water column
year - Any period of twelve consecutive months, unless "calendar year" is specified
yr - Year, or any 12 consecutive-month period, as determined by context

## Preamble

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16, section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4.

## General Conditions

G1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan.
[Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]

G2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

***US EPA - Region IV***
***Air Enforcement Branch***
***Atlanta Federal Center***
***61 Forsyth Street***
***Atlanta, GA 30303-8960***

***Air Pollution Control District***
***701 W. Ormsby Avenue, Suite 303***
***Louisville, Kentucky 40203-3137***

The owner or operator shall submit the Compliance Certification on or before April 15 of each year, or other such due date as required by another applicable regulation.

G3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16, section 4.3.4. The progress reports shall contain:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.

b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

G4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

G5. **Emergency Provision**

a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation

2.16 are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

i. An emergency occurred and that the owner or operator can identify the cause of the emergency;

ii. The permitted facility was at the time being properly operated;

iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and

iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]

G6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 1.2.5]

G7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

G8. **Enforceability Requirements** - Except for the conditions that are specifically designated as District-Only Enforceable Conditions, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]

G9. **Enforcement Action Defense**

a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. [Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]

G10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.

G11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this

permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. [Regulation 2.16, section 4.1.13.6]

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]

G12. **Insignificant Activities** - The owner or operator shall:

a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, Section 5]

b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, section 4.3.5.3.6]

G13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours: [Regulation 2.16, section 4.3.2]

a. Enter the premises to inspect any emissions-related activity or records required in this permit.

b. Have access to and copy records required by this permit.

c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.

d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

G14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 30 June and 1 July through 31 December of each calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be submitted by the 60$^{th}$ day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

| Reporting Period | Report Due Date |
|---|---|
| January 1 - June 30 | August 29 |
| July 1 - December 31 | March 1 of the following year |

If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

G15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. [Regulation 2.16, section 4.1.5]

G16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.

G17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.

G18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application, then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.

G19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.

G20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

G21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]

G22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.

G23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.

G24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:

a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;

b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;

c. Knowingly making any false statement in any permit application;

d. Noncompliance with Regulation 1.07, section 4.2; or

e. Noncompliance with KRS Chapter 77.

G25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.

G26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.

G27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.

G28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.

G29. **Reopening for Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16, section 5.9.

G30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16, section 5.10.

G31. **Risk Management Plan [112(r)]** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.

G32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected.
[Regulation 2.16, section 4.1.12]

G33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.

G34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.

G35. **Submittal of Reports, Data, Notifications, and Applications**

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16, sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

***Air Pollution Control District***
***701 West Ormsby Avenue, Suite 303***
***Louisville, Kentucky 40203-3137***

b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16, sections 3.3 and 5.8.5 shall be mailed to EPA at:

***US EPA - Region IV***
***APTMD - 12th floor***
***Atlanta Federal Center***
***61 Forsyth Street***
***Atlanta, GA 30303-3104***

G36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

| Regulation | Title |
|---|---|
| 1.01 | General Application of Regulations and Standards |
| 1.02 | Definitions |
| 1.03 | Abbreviations and Acronyms |
| 1.04 | Performance Tests |
| 1.05 | Compliance With Emissions Standards and Maintenance Requirements |
| 1.06 | Source Self-Monitoring, Emission Inventory Development and Reporting |
| 1.07 | Excess Emissions During Startups, Shutdowns, and Upset Conditions |
| 1.08 | Administrative Procedures |
| 1.09 | Prohibition of Air Pollution |
| 1.10 | Circumvention |
| 1.11 | Control of Open Burning |
| 1.14 | Control of Fugitive Particulate Emissions |
| 1.18 | Rule Effectiveness |
| 1.19 | Administrative Hearings |
| 2.01 | General Application (Permit Requirements) |
| 2.02 | Air Pollution Regulation Requirements and Exemptions |
| 2.03 | Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements |
| 2.04 | Construction or Modification of Major Sources in or Impacting Upon Non-Attainment Areas (Emission Offset Requirements) |
| 2.05 | Prevention of Significant Deterioration |
| 2.06 | Permit Requirements – Other Sources |
| 2.07 | Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits |
| 2.09 | Causes for Permit Modification, Revocation, or Suspension |
| 2.10 | Stack Height Considerations |
| 2.11 | Air Quality Model Usage |
| 3.01 | Ambient Air Quality Standards |
| 4.01 | General Provisions for Emergency Episodes |
| 4.02 | Episode Criteria |
| 4.03 | General Abatement Requirements |
| 4.04 | Particulate and Sulfur Dioxide Reduction Requirements |
| 4.05 | Hydrocarbon and Nitrogen Oxides Reduction Requirements |
| 4.06 | Carbon Monoxide Reduction Requirements |
| 4.07 | Episode Reporting Requirements |
| 6.01 | General Provisions (Existing Affected Facilities) |
| 6.02 | Emission Monitoring for Existing Sources |
| 7.01 | General Provisions (New Affected Facilities) |

District Only Enforceable Regulations:

| Regulation | Title |
|---|---|
| 1.12 | Control of Nuisances |
| 1.13 | Control of Objectionable Odors |
| 2.08 | Emission Fee, Permit Fees and Permit Renewal Procedures |
| 2.16 | Title V Operating Permits |
| 5.00 | Definitions |
| 5.01 | General Provisions |
| 5.02 | Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants |
| 5.14 | Hazardous Air Pollutants and Source Categories |
| 5.15 | Chemical Accident Prevention Provisions |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant |
| 5.23 | Categories of Toxic Air Contaminants |
| 7.02 | Adoption and Incorporation by Reference of Federal New Source Performance Standards |

G37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

a. Any facility having any refrigeration equipment that normally contains fifty pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;

b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;

c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;

d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been

properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;

g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

# Plantwide Requirements

## Facility Description

Manufacturer of flexible packaging laminates for healthcare, pharmaceutical, food, dairy, household and personal care, tobacco and industrial. Combining specialized aluminum foils, steel, films, paper stock, resins, sealants, adhesives and 10-color rotogravure printing capability, LLFlex, LLC manufactures custom lid stock, pouch stock, cable armoring, and sterilizable laminates requiring specific barrier and sealant performance.

## Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 2.05 | Prevention of Significant Deterioration of Air Quality | 1 |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant | 1 through 5 |
| 5.23 | Categories of Toxic Air Contaminants | 1 through 6 |

## Plantwide Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. HAP**[1]

i. The owner or operator shall not allow or cause the plantwide emissions of all HAPs combined to equal or exceed 25 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]

ii. The owner or operator shall not allow or cause the plantwide emissions of any individual HAP to equal or exceed 10 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]

**b. TAC**

i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels whether specifically established by modeling or determined by the District to be *de minimis*.[2]
[Regulations 5.00 and 5.21]

ii. The owner or operator shall perform a new Environmental Acceptability (EA) Demonstration or *de minimis* determination when the following events occur and submit the EA Demonstration on the schedule noted in the reporting section.[3]

(1) An application to construct or modify a process or process equipment at a Group 1 or 2 stationary source is submitted to the District pursuant to Regulation 2.03, 2.04 or 2.05.
[Regulation 5.21, section 4.22.1]

[1] LLFlex, LLC requested source-wide HAP limits (Single HAP < 10 tpy, Total HAP < 25 tpy) to become an area source of HAP and preclude applicability of 40 CFR 63 Subpart KK [40 CFR 63.820(a)(1)] and 40 CFR 63 Subpart DDDDD [40 CFR 63.7485] on 01/02/2019.

[2] LLFlex submitted the TAC Environmental Acceptability Demonstration to the District in March 2006, March 2008 and March 2012. The District reviewed the EA Demonstrations submitted by the source. Environmental Acceptability of emissions of all TACs, including a determination that emissions of all TACs are *de minimis* has been demonstrated for each "New or modified process or process equipment" and each "Existing process or process equipment" located at the stationary source. Emission Unit U1/U2 process equipment TAC emissions are *de minimis* pursuant to Regulation 5.21, Section 2.1 (MSDS/SDS Trace TAC). Emission Unit U3 process equipment TAC emissions are *de minimis* based on an uncontrolled potential to emit (PTE) pursuant to Regulation 5.21, Section 4.2.2. Emission Unit U4 process equipment TAC emissions are *de minimis* pursuant to Regulation 5.21, Section 2.7 (natural gas combustion). TAC emissions from Insignificant Activities (as defined in Regulation 2.16) are *de minimis* pursuant to Regulation 5.21, Section 2.3. Because all TAC emissions from all processes and process equipment have been demonstrated to be *de minimis*, Tier 3 or Tier 4 modeling was not required to demonstrate environmental acceptability for this source.

[3] Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to perform a new Environmental Acceptability Demonstration.

(2) Modification of any physical modeling parameters such as fence lines or building heights that are not otherwise subject to the permit requirements that affects the demonstration of compliance occurs. [Regulation 5.21, section 4.22.2]; or

(3) A change in a process equipment, including raw material or fuel type substitution occurs, unless the change meets the conditions of Section 4.23. [Regulation 5.21, section 4.22.3]

iii. When a new TAC is introduced or for any existing TAC which does not have an established BAC or *de minimis* value, the owner or operator shall calculate and report these values as part of any aforementioned EA Demonstration. The form, located in Attachment C, may be used for determining BAC and *de minimis* values. [Regulation 5.20, section 3 and 4]

**c. VOC**

i. The owner or operator shall not allow plantwide VOC emissions to equal or exceed 250 tons per 12 consecutive months.[4] [Regulation 2.05]

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

**a. HAP**

i. The owner or operator shall, monthly, maintain records including calculations that show the calendar month and rolling 12-month plantwide total HAP emissions.

ii. The owner or operator shall, monthly, maintain records that can be used to calculate calendar month and rolling 12-month individual HAP emissions.

(1) If 12-month plantwide total HAP emissions exceed 9 tons, the owner or operator shall, monthly, maintain records including calculations that show the calendar month and rolling 12-month plantwide HAP emission for each individual HAP emitted.

**b. TAC**

i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to (M)SDS, analysis of emissions, and/or modeling results.

**c. VOC**

[4] The plantwide 250 tpy VOC limit is a PSD avoidance limit.

i. The owner or operator shall, monthly, calculate and record the monthly and 12-consecutive month plantwide VOC emissions utilizing the methodology contained in Attachment A.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

**a. HAP**

i. The owner or operator shall report the monthly and consecutive 12-month plantwide emissions of total HAP for each month in the reporting period.

ii. If consecutive 12-month plantwide total HAP emissions exceed 9 tons during any month of the reporting period, the owner or operator shall report the monthly and consecutive 12-month plantwide emissions of the highest individual HAP for each month in the reporting period.

**b. TAC**

i. The owner or operator shall submit new EA Demonstrations involving applications to construct or modify with the construction permit application. [Regulation 5.21, section 4.22.1]

ii. The owner or operator shall submit new EA Demonstrations involving modification of any physical modeling parameter, such as fence lines or building heights, that are not otherwise subject to the permit requirements for that facility that affects the demonstration of compliance with the operating permit renewal application. [Regulation 5.21, section 4.22.2]

iii. The owner or operator shall submit new EA Demonstrations involving a change in a process or process equipment, including raw material or fuel type substitution before making the change.
[Regulation 5.21, section 4.22.3]

(1) Prior approval by the District is not required if the change does not result in emissions that exceed an EA goal, does not cause emissions of a TAC to no longer be de minimis, and a permit modification is not required. In this case, the new EA Demonstration shall be submitted within 6 months of the change.

**c. VOC**

i. For the 250 tons per 12-consecutive months plantwide VOC limit, the owner or operator shall report:

(1) The monthly and 12-consecutive month plantwide VOC emissions;

(2) Identification of all periods of exceedances of the plantwide VOC limit including the quantity of excess emissions;

(3) Reason for excess emissions; and

(4) Description of corrective action taken to prevent future exceedances.

## Emission Unit U1/U2: Laminators and Dry Ovens

### Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements | 1, 2, 3, 4 and 5 |
| 6.29 | Standard of Performance for Existing Graphic Arts Facilities Using Rotogravure and Flexography | 1, 2, 3.1.4.2 and 3.2 |
| 40 CFR 52.920 | Approval and Promulgation of Implementation Plans - Kentucky | 63 FR 1929, 1/13/1998 |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
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## Equipment

| Emission Point | Description | Install Date | Applicable Regulations[5] | Control ID | Release ID |
|---|---|---|---|---|---|
| E-22 | One (1) Lacquer mixing room containing three (3) submerged-fill arms for filling drums with solvent, one (1) mixer and one (1) soak tank to support *Printing Line* operations in Emission Unit U2. | 1956 | 6.29 | N/A | S-20 |
| E-23 | One (1) Gravure Impression Cylinder Washer to support *Printing Line* operations in Emission Unit U2. | 1956 | 6.29 | N/A | N/A |
| E-13B | Storage of coatings in portable tote tanks, (~350 gallons each, ~50 on site) | N/A | 6.29 | N/A | N/A |
| E-1 | Laminator #12 [Inta-Roto Inc., Model # GM-2000-M-201] | 1970 | STAR[6]: 6.29 | N/A[7] | S-1 (new) |
| E-1a | Oven #12 [7.50 MMBtu/hr][8] | 1970 | | N/A | |
| E-2 | Laminator #6 [Inta-Roto Inc., Model # GM-1000] | 1956 | STAR; 40 CFR 52.920 | N/A | S-2 |
| E-3 | Laminator #7 [Schmutz Mfg, Model # 2768] | 1956 | | | S-3 |
| E-4 | Laminator #8 [Miesel Press Co] | 1961 | | | S-4, S-5, S-6 |
| E-5 | Laminator #9 Coating Station #1 [Miesel Press Co] | 1961 | | | S-7, S-8, S-9 |
| E-16 | Laminator #9 Coating Station #2 [Miesel Press Co.] | 1961 | | | |
| E-6 | Laminator #10 Coating Station #1 [Schmutz Mfg, Model # 2769] | 1971 | | | S-10 |
| E-10 | Laminator #10 Coating Station #2 [Cerutti, Model # 28R-38R] | 1971 | | | S-16 |

[5] 40 CFR 63 Subpart KK is no longer applicable because LLFlex, LLC limited its potential to emit HAP through establishment of source-wide HAP limits (Single HAP < 10 tpy, Total HAP < 25 tpy) under a appropriate mechanism available through the permitting authority to preclude applicability 40 CFR 63 Subpart KK per 40 CFR 63.820(a)(7) and 40 CFR 63.820(a)(2).

[6] STAR denotes District Regulations 5.00, 5.01, 5.20, 5.21, 5.22. and 5.23

[7] Thermal Oxidizer (C-1) was shut down as of 2/3/17.

[8] The associated ovens for each laminator are covered under Regulation 6.29, Section 1.8 as part of the Printing Line, but are not subject to the VOC coating standards in Section 3.

| Emission Point | Description | Install Date | Applicable Regulations[5] | Control ID | Release ID |
|---|---|---|---|---|---|
| E-7 | Laminator #11 [Anaconda & Fisher Klosterman, Model # MUCT-609-48-(60)] | 1967 | | | S-11 |
| E-2a | Oven #6 [4.00 MMBtu/hr][9] | 1956 | STAR; 6.29 | N/A | S-2 |
| E-3a | Oven #7 [3.60 MMBtu/hr][9] | 1956 | | | S-3 |
| E-4a | Oven #8 [5.40 MMBtu/hr][9] | 1961 | | | S-4, S-5, S-6 |
| E-5a | #9 Oven #1 [3.60 MMBtu/hr][9] | 1961 | | | S-7, S-8, S-9 |
| E-16a | #9 Oven #2 [1.8 MMBtu/hr][9] | 1961 | | | |
| E-6a | #10 Oven #1 [3.60 MMBtu/hr][9] | 1971 | | | S-10 |
| E-10a | #10 Oven #2 [0.8 MMBtu/hr][9] | 1971 | | | S-16 |
| E-7a | Oven #11 [3.60 MMBtu/hr][9] | 1967 | | | S-11 |
| E-8 | Laminator #14 [Inta-Roto Inc., Model # GM-1000] | 1971 | STAR; 40 CFR 52.920 | C-2 | S-12 |
| E-8a | Oven #14 [3.60 MMBtu/hr][9] | 1971 | STAR; 6.29 | | |
| E-9 | Coater #15 [Waldron, Model # K4479] | 1956 | 40 CFR 52.920 | N/A | S-13, S-14, S-15 |
| E-9a | Oven #15 [8.00 MMBtu/hr] | 1956 | N/A | | |

## Control Devices

| Control ID | Description | Control Efficiency |
|---|---|---|
| C-2 | Catalytic Oxidizer [TEC Systems, Model Magnum 14000] Installed April 2016, 550°F operating temperature | >65% |

[9] The associated ovens for each laminator are covered under Regulation 6.29, Section 1.8 as part of the Printing Line, but are not subject to the VOC coating standards in Section 3.

## U1/U2 Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. HAP**

i. See Plantwide Requirements.

**b. TAC**

i. See Plantwide Requirements. [10]

**c. VOC**

i. The owner or operator of emission point E-1 (Laminator 12) shall not cause or allow the emissions of VOC from any affected facility unless at least one of the following requirements is met: [11] [Regulation 6.29, section 3.1]

(1) The volatile fraction of all inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 25% VOC by volume, [Regulation 6.29, section 3.1.1]

(2) The non-volatile fraction, minus water and exempt solvents, of all inks and coatings, as applied to the substrate, used on the affected facility shall be at least 60% by volume,
[Regulation 6.29, section 3.1.2]

(3) All inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 0.5 pound of VOC per pound of solids, or [Regulation 6.29, section 3.1.3]

(4) The VOC emissions shall not exceed 35% by weight of the VOC net input into the affected facility for packaging rotogravure printing. [Regulation 6.29, section 3.1.4.2]

ii. Compliance with the requirements of Regulation 6.29, section 3.1 shall be based upon the inks and coatings, as applied, used on Emission point E-1 during a calendar-day averaging period. [Regulation 6.29, section 3.2]

[10] The TAC emissions from the combustion of natural gas are "*de minimis* emissions" pursuant to District Regulation 5.21, Section 2.7. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include other TAC emissions from a process or process equipment which are not the products of the combustion of natural gas.

[11] Emission points E-2, E-3, E-4, E-5, E-16, E-6, E-10, E-7, E-8 & E-9 are covered by a source-specific State Implementation Plan Revision. The printing/coating machines are treated as one affected facility with a pound per day and ton per year VOC emission limit. The source must comply with District Regulation 6.29, section 3 material composition limits for emission point E-1.

iii. The owner or operator shall operate and maintain the control device (C-2) at all times emission point E-8 (Laminator 14) applies solvent borne coatings, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation 1.05, section 5]

iv. For Laminators #6, #7, #8, #9, #10, #11, #14, and Coater #15 combined:[12, 13] [APCB Board Order 11/18/2020] [40 CFR 52.920]

(1) The owner or operator shall not allow the combined VOCs to exceed 266.2 tons/year. (This includes VOC emissions from all solvent-borne, water-borne and high solids coatings/inks.)

(2) The owner or operator shall not allow the combined VOCs to exceed 1,458 pounds per day. (This included VOC emissions from all solvent-borne, water-borne and high solids coatings/inks.)

v. The owner or operator of Laminators #6, #7, #8, #9, #10, #11, #14 and Coater #15 combined shall not cause or allow the emissions of VOC from any affected facility unless at least one of the following requirements is met: [APCD Board Order 11/18/2020] [40 CFR 52.920]

(1) The volatile fraction of all inks and coatings, as applied to the substrate, used on the affected facility, shall contain no more than 25% VOC by volume,

(2) The non-volatile fraction, minus water and exempt solvents, of all inks and coatings, as applied to the substrate, used on the affected facility shall be at least 60% by volume,

(3) All inks and coatings, as applied to the substrate, used on the affected facility shall contain no more than 0.5 pounds of VOC per pound of solids, or

(4) The VOC emissions shall not exceed 35% by weight of the VOC net input into the affected facility.

vi. See Plantwide Requirements.

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

[12] Pursuant to 40 CFR 64.2(b)(1)(iv), emission limitation or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions with a source or between sources are exempt from the requirements of 40 CFR Part 64. Therefore, compliance assurance monitoring (CAM) provisions are not applicable to any affected facility subject to the Source-Specific VOC Bubble Limit.

[13] Affected facilities subject to the Source-Specific VOC Bubble Limit include seven (7) rotogravure printing/coating machines (Laminator #6, #7, #8, #9, #10, #11 and #14) and one coating machine (Coater #15); these affected facilities shall be treated as one affected facility combined under a bubble when determining compliance with the Source-Specific SIP VOC Bubble Limit.

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

a. **HAP**

i. See Plantwide Requirements.

**b. TAC**

i. See Plantwide Requirements.

**c. VOC**

i. For emission point E-2 (Laminator #6):

(1) The owner or operator of an affected facility shall, monthly, maintain records of the production rates and raw materials used to demonstrate compliance with the 40.689 tons per 12-month consecutive period limit to avoid PSD/NSR.

(2) The owner or operator shall, monthly, calculate and record the VOC emissions and the rolling 12-month total VOC emissions.

ii. For emission point E-1 (Laminator 12): The owner or operator of an affected facility subject to this regulation shall maintain records of operations for the approved averaging period for the most recent five-year period. The records shall be made available to the District, the Cabinet, and the EPA upon request. The records shall include, but not be limited to, the following: [Regulation 6.29, section 6.1]

(1) The regulation and section number applicable to the affected facility for which the records are being maintained,
[Regulation 6.29, section 6.1.1]

(2) The application method and substrate type (metal, plastic, paper, etc.), [Regulation 6.29, section 6.1.2]

(3) Include the amount and type of each ink, coating, and solvent used at each point of application, including exempt compounds, during the averaging period. The District shall approve a written request for the usage record to reflect a period longer than the compliance averaging period if the material usage is prorated for each compliance averaging period by using a measurable indicator that is determined by the District to be directly and proportionally related to material usage, such as linear feet or area of substrate printed, [Regulation 6.29, section 6.1.3]

(4) The VOC content as applied in each ink, coating, and solvent, and [Regulation 6.29, section 6.1.4]

(5) The date for each application of each ink, coating, and solvent. [Regulation 6.29, section 6.1.5]

iii. The owner or operator shall, daily, monitor and record the catalyst bed inlet temperature (C-2) when Laminator #14 is using solvent based coatings.

iv. For laminators #6, #7, #8, #9, #10, #11, & #14, and Coater #15 combined:

(1) The owner or operator shall, monthly, calculate and record the VOC emissions from the affected facilities subject to the Source-Specific SIP VOC Bubble Limit and the rolling 12-month total VOC emissions.

(2) The owner or operator shall use a daily averaging period (three 8-hour shift operation) to demonstrate compliance.

(3) The owner or operator shall, monthly, calculate and record the average lb/day VOC emissions for all affected facilities subject to the Source-Specific SIP VOC Bubble Limit based on actual VOC material throughput on each operating day. The owner or operator shall complete required calculations within 30 days following the end of each calendar month.

(4) The owner or operator shall, daily, maintain records of operations and make records available to the District upon request. The records shall include, but not be limited to, the following:

(a) The amount and type of each ink, coating, and solvent used at each point of application, including excluded compounds, (pursuant to definition of "Volatile Organic Compounds" in District Regulation 1.02), per day;

(b) Any periods of time where a machine was operating with solvent based inks and the control device was not operating or a declaration that the control device operated at all times that day when the process was operating; and

(c) Technical material specifications that include all information needed to determine compliance for all coatings used on these machines.

(5) If there is any time that the control device (C2) is bypassed or not in operation when a machine is operating with solvent based inks or coatings, then the owner or operator shall keep a record of the following for each bypass event:

(a) Date;

(b) Start time and stop time;

(c) Identification of the control device and process equipment;

(d) Summary of the cause or reason for each bypass event;

(e) Corrective action taken to minimize the extent or duration of the bypass event; and

(f) Measures implemented to prevent reoccurrence of the situation that resulted in the bypass event.

(g) If this event is due to an upset condition, you must report as specified in District regulation 1.07, section 4.

v. See Plantwide Requirements.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

a. **HAP**

i. See Plantwide Requirements.

**b. TAC**

i. See Plantwide Requirements.

**c. VOC**

i. Identification and description of any deviation of a permit term or condition specified in this permit.

ii. Identify all daily temperature checks that exceeded indicator range during the reporting period. Exceedance is defined as any departure from an established control device (C-2) performance indicator range (i.e. the minimum catalyst bed inlet temperature is less than 550°F)

iii. For Laminator 12, when VOC raw material composition does not meet at least one of the requirements of Regulation 6.29, section 3.1, the identification of all periods VOC raw material composition,

(1) Exceeded 25% VOC by volume,

(2) The non-volatile fraction, minus water and exempt solvents, of all inks and coatings, as applied to the substrate, used on the affected facility were more than 60% by volume,

(3) Exceeded 0.5 pound of VOC per pound of solids, or

(4) Identification of all periods when the VOC emissions exceeded 35% by weight of the VOC net input into the affected facility.

iv. If the plantwide VOC emission limit of less than 250 tons per 12 consecutive month period is exceeded, then the owner or operator shall report:

(1) The monthly and rolling 12 month VOC emissions;

(2) Identification of all periods of exceedances of the VOC limit including the quantity of excess emissions;

(3) Reason for excess emissions; and

(4) Description of corrective action taken to prevent future exceedances.

v. For Laminators #6, #7, #8, #9, #10, #11, #14, and Coater #15 combined the owner or operator shall report:

(1) For the 266.2 tpy Bubble VOC limit:

(a) The monthly and rolling 12 month VOC emissions;

(b) Identification of all periods of exceedances of the VOC limit including the quantity of excess emissions;

(c) Reason for excess emissions; and

(d) Description of corrective action taken to prevent future exceedances;

(2) For the 1,458 lb/day Bubble VOC limit:

(a) Identification of all periods of exceedances of the lb/day VOC limit including the quantity of excess emissions;

(b) Reason for excess emissions; and

(c) Description of corrective action taken to prevent future exceedances;

(3) For the VOC raw material composition requirments,

(a) Any times inks or coatings as applied or used did not meet the content requirements of the ABO (dated 11/18/2020), or a negative declaration if all limits were met; or

(b) The number of times the vent stream bypasses the control device and is vented to the atmosphere when a machine is operating with solvent based inks or coatings; and the duration of each bypass to the atmosphere.

(i) Identification and brief description of any deviation from a permit term or condition, including bypasses or periods of excess emissions. If there are no deviations from a permit condition or excess emissions during a given reporting period, the owner or operator shall submit a negative declaration stating no permit deviations or excess emissions occurred during the reporting period.

vi. See Plantwide Requirements.

**S4. Testing**
[Regulation 2.16, section 4.3.1]

**a. General Requirements**

i. Devices of adequately similar design may be represented by a common performance test contingent upon review and approval of the testing protocol by the District.

ii. Before conducting a performance test, the owner or operator shall submit a written test plan (protocol). The plan shall include the EPA test methods that will be used for testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators that will be monitored during the performance test. The test plans shall be furnished to the District at least 30 calendar days prior to the actual date of the performance test. Attachment B - Protocol Checklist for a Performance Test to this permit provides information that must be submitted in the protocol.

iii. The owner or operator shall be responsible for obtaining and analyzing audit samples when the EPA Reference Method is used to analyze samples, to demonstrate compliance with the source's emission regulation. The audit samples shall be available for verification by the District during the on-site testing.

iv. The owner or operator shall provide the District at least 10 working days prior notice of any performance test to afford the District the opportunity to have an observer present.

v. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 calendar days following the actual date of completion of the performance test.

**b. VOC**

i. Specific Test Requirements:

(1) The owner or operator shall perform an EPA Reference Method 25 or 25A performance test on the inlet and outlet of Control Device ID C-2. The test shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test, at maximum capacity, allowable/permitted capacity, or at a level of capacity which resulted in the greatest emissions, may necessitate a re-test or necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.

(2) The owner or operator shall perform a capture efficiency test for the catalytic oxidizer using EPA guidelines. In lieu of performing a capture efficiency test, the owner or operator may submit a reasonable estimate of capture efficiency with thorough justification subject to written approval by the District.

(3) The stack tests shall include sampling of the inlet and outlet gas streams of the catalytic oxidizer to determine the control efficiency for VOC. The stack test report shall include, at a minimum, the inlet and outlet lb/hr VOC emissions, VOC destruction and capture efficiencies, Federal Test Methods used during testing, volumetric air flow rate, volumetric flow sampling location (location traverse points), stack diameter, $\%O_2$, and % moisture.

ii. By no later than July 26, 2027, the owner or operator shall perform EPA Reference Method Testing of thermal oxidizer emissions for applicable VOC emitted at the oxidizer stack (S-12). Testing shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform testing, at maximum capacity, allowable/permitted capacity, or at a level of capacity which results in the greatest emissions, may necessitate a re-test or a revision of the allowable emission standards as applicable.

## Emission Unit U3: Storage Vessels

### Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS[14] | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements | 1, 2, 3, 4 and 5 |
| 7.12 | Standard of Performance for New Storage Vessels for Volatile Organic Compounds | 1 through 5, 7 and 8 |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant | 1 through 5 |
| 5.23 | Categories of Toxic Air Contaminants | 1 through 6 |

### Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|---|---|---|---|---|---|
| E-11 | Tank #3, One (1) 1,000-gallon VOC storage vessel [Printing solvents tank] | 1988 | STAR & 7.12 | N/A | N/A |
| E-12 | Tank #2, One (1) 2,000-gallon VOC storage vessel [Printing solvents tank] | 1988 | | | N/A |

[14] The Federal Regulation, 40 CFR 60 Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984, was amended by EPA on October 15, 2003. The amendment excluded storage vessels that contain a liquid with a maximum true vapor pressure below 3.5 kilopascals (26.2 mm Hg). Due to the tank sizes, they are not subject to 40 CFR 60 Subpart Kb.

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|---|---|---|---|---|---|
| E-13 | Tank #1, One (1) 1,000-gallon VOC storage vessel [Printing solvents tank] | 1988 | | | N/A |
| E-13A | Tank #4, One (1) 10,000-gallon VOC storage vessel [Water-based coatings tank] | 1988 | | | N/A |

## Control Devices

There are no control devices or stacks associated with Emission Unit U2. Tanks #1, #2, and #3 are each equipped with a submerged fill pipe. Tank #4 is equipped with a 4-inch conservation vent but does not have a submerged fill pipe.

## U3 Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. TAC**

i. See Plantwide Requirements.

**b. VOC**

i. The owner or operator shall not store materials with an "as stored" True vapor pressure greater than or equal to 1.5 psia in Emission Points E-11, E-12, E-13, and E-13A, unless the tank is equipped with a permanent submerged fill pipe. [Regulation 7.12, section 3]

ii. See Plantwide Requirements.

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

**a. TAC**

i. See Plantwide Requirements.

**b. VOC**

i. The owner or operator of the storage vessels shall maintain records of the material stored in Emission Point E-13A (Tank #4). If the contents of the storage vessel are changed a record shall be made of the new contents, including the true vapor pressure (determined using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the liquid) of the new material, and the date of the change in order to demonstrate compliance with Regulation 7.12, section 5.2.

ii. The owner or operator shall keep a record that shows if the storage vessel is equipped with a submerged fill pipe. Submerged fill pipe means any fill pipe the discharge of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean every fill pipe the discharge opening of which is entirely submerged when the liquid level is 2 times the fill pipe diameter above the bottom of the tank.

iii. See Plantwide Requirements.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

**a. TAC**

i. See Plantwide Requirements.

**b. VOC**

i. The owner or operator shall submit notification to the District if any materials that are stored in Emission Point E-13A (Tank #4) exceed the vapor pressure limit of 1.5 psia determined by using the average monthly storage temperature and typical Reid vapor pressure of the contained liquid or from typical available data on the contained liquid.

ii. See Plantwide Requirements.

## Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1. Additionally, the District has reviewed the applicant's request for a permit shield and determined the following requirements are not applicable to affected facilities at the source:

| Regulatory Citation | Emissions Unit | Regulatory Requirement | Basis for Non-Applicability |
|---|---|---|---|
| 40 CFR 60 Subpart Kb | U3: Storage Vessels | Standards of Performance for Volatile Organic Liquid Storage Vessels: Subpart Kb applies to storage vessels with the capacity greater than or equal to 75 cubic meters (m3) that is used to store volatile organic liquids (VOL)for which construction, reconstruction, or modification commenced after July 23, 1984. | The Site does not have storage vessels for VOL with a capacity of 75 $m^3$ or greater [40 CFR §60.110b(a)]. |
| 40 CFR 60 Subpart QQ | U1/U2: Laminators, Coater #15, and Dry Ovens | Standards of Performance for the Graphic Arts Industry – Publication Rotogravure Printing: Subpart QQ applies to publication rotogravure printing presses that were constructed, modified, or reconstructed after October 28, 1980. | The Site does not operate *Publication rotogravure printing presses* [as defined in 40 CFR 60.431(a)]. |
| 40 CFR 60 Subpart QQ | U1/U2: Laminators, Coater #15, and Dry Ovens | Standards of Performance for Pressure Sensitive Tape and Label Surface Coating Operations: Subpart RR applies to coating lines used in the manufacture pressure sensitive tape and label materials which was constructed, modified, or reconstructed after December 30, 1980. | The Site does not operate a coating line [as defined in 40 CFR §60.441(a)] to produce pressure sensitive tape and/or label materials. Aqueous and solvent based coating lines which apply a variety of adhesives and specialty coatings to paper and film substrates and do not have pressure sensitive properties are not subject to Subpart RR per U.S. EPA Applicability Determination Index Control Numbers NR38 and 9900023. |
| 40 CFR 60 Subpart FFF | U1/U2: Laminators, Coater #15, and Dry Ovens | Standards of Performance for Flexible Vinyl and Urethane Coating and Printing: Subpart FFF applies to rotogravure printing lines used to print or coat flexible vinyl or urethane products which were constructed, modified, or reconstructed after January 18, 1983 | The Site does not print or coat *Flexible vinyl or urethane products* [as defined in 40 CFR 60.581(a)]. |
| 40 CFR 60 Subpart SSS | U1/U2: Laminators, Coater #15, and Dry Ovens | Standards of Performance for Magnetic Tape Coating Facilities: Subpart SSS applies to coating operations in the manufacture of magnetic tape constructed, modified, or reconstructed after January 22, 1986. | This Site does not operate a *Coating operation* [as defined in 40 CFR §60.711(a)(5)] or manufacture *magnetic tape* [as defined in 40 CFR §60.711(a)(13)] |
| 40 CFR 60 Subpart VVV | U1/U2: | Standards of Performance for Polymeric Coating of Supporting Substrates | The Site does not perform *Polymeric coating of supporting* |

| Regulatory Citation | Emissions Unit | Regulatory Requirement | Basis for Non-Applicability |
|---|---|---|---|
| | Laminators, Coater #15, and Dry Ovens | Facilities: Subpart VVV applies to each coating operation and coating mix preparation equipment used to prepare coatings for the polymeric coating of supporting substrates constructed, modified, or reconstructed after April 30, 1987 | *substrates* [as defined in 40 CFR 60.741(a)]. The Site only performs coating of supporting webs made of paper, plastic film, metallic foil, or metal coil. |
| 40 CFR 63 Subpart KK | U1/U2: Laminators, Coater #15, and Dry Ovens | National Emissions Standards for the Printing and Publishing Industry: Subpart KK applies to major sources of HAP at which publication rotogravure, product and packaging rotogravure, or wide-web flexographic printing presses are operated | The Site is not a major source of HAP (as defined in 40 CFR §63.2) because it established area source status through an appropriate mechanism available by the permitting authority (LMAPCD). Therefore, Subpart KK is not applicable per 40 CFR §63.820(a)(7) and 40 CFR §63.820(a)(2). |
| 40 CFR 63 Subpart JJJJ | U1/U2: Laminators, Coater #15, and Dry Ovens | National Emissions Standards for Hazardous Air Pollutants - Paper and Other Web Coating: Subpart JJJJ applies to major sources of HAP at which web coating lines are operated. | The Site is not a major source of HAP (as defined in 40 CFR 63.2). Therefore, in accordance with 40 CFR §63.1(c)(2) and Table 2 to Subpart JJJJ, Site coating lines metal webs used in flexible packaging (as described in 40 CFR §63.3300) are not subject to Subpart JJJJ. |
| 40 CFR 63 Subpart OOOO | U1/U2: Laminators, Coater #15, and Dry Ovens | National Emissions Standards for Hazardous Air Pollutants - Printing, Coating, and Dyeing of Fabrics and Other Textiles: Subpart OOOO applies to major sources of HAP that print, coat, slash, dye, or finish fabric and other textiles. | No *Fabric* or *Textile* (as defined in 40 CFR §63.4371) is printed, coated, dyed, or finished at the Site. |
| 40 CFR 63 Subpart DDDDD | Heating Boiler (IA3) | National Emissions Standards for Major Sources - Industrial, Commercial, and Institutional Boilers: Subpart DDDDD applies to major sources of HAP that owns and operates an industrial, commercial, or institutional boiler or process heater. | The Site does not operate a *process heater* (as defined at 4§06 3.7C5F75R). The Site is not a major source of HAP (as defined in 40 CFR §63.2). |
| 40 CFR 63 Subpart JJJJJJ | Heating Boiler (IA3) | National Emissions Standards for Area Sources - Industrial, Commercial, and Institutional Boilers: Subpart JJJJJJ applies to area sources of HAP that owns and operated an industrial, commercial, or institutional boiler or process heater. | The Site is an area source of HAP (as defined in 40 CFR §63.2) and a *Boiler* (as defined at 40 CFR §63.11237); however, the Site operates a *gas-fired boiler* (as defined in 40 CFR §63.11237) which is not subject to the provisions of Subpart JJJJJJ per 40 CFR §63.11195(e). |
| 40 CFR 63 Subpart HHHHH | U1/U2: Lacquer Mixing Room (Emissions Point E-22) | National Emissions Standards for Hazardous Air Pollutants - Miscellaneous Coating Manufacturing: Subpart HHHHH applies to major sources of HAP that manufacture coatings and process, use or produce HAP. | The Site does not meet all applicability requirements in 40 CFR 63.7985(a)(1) – (4) [i.e., Site is not a major source of HAP as in 40 CFR 63.7985(a)(1)]. Modifying a purchased coating in |

| Regulatory Citation | Emissions Unit | Regulatory Requirement | Basis for Non-Applicability |
|---|---|---|---|
| | | | preparation for application at the purchasing facility is not subject to the requirements of miscellaneous coating manufacturing sources in 40 CFR §63.7985(d)(5). |

## Off-Permit Documents

| Document | Date |
|---|---|
| SIP Revision, approved and published in the Federal Register, 40 CFR Part 52, Subpart S, 52.920 | 16 May 1990 and 13 January 1998 |
| 1.18 Rule Effectiveness Plan | 20 September 1994 |
| 1.18 Rule Effectiveness Plan (Revised) | 30 January 1995 |
| Rule Effectiveness Improvement Measures | 27 April 1995 |
| Agreed Board Order | 11 November 2020 |

## Insignificant Activities

| Equipment | Qty. | PTE (ton/yr) | Regulation Basis |
|---|---|---|---|
| Internal combustion engines (forklifts) | 4 | 0.14 $NO_x$ | Regulation 1.02, Appendix A |
| Maintenance shop brazing, soldering or welding equipment | 2 | 0.02 PM | Regulation 1.02, Appendix A |
| Woodworking, not including conveying, hogging or burning of sawdust (see IA1) | 1 | 0.03 PM | Regulation 1.02, Appendix A; See Note 7 |
| Emergency relief vents and ventilating systems (not otherwise regulated) | 3 | N/A | Regulation 1.02, Appendix A |
| Laboratory ventilating | 1 | 0.03 VOC | Regulation 1.02, Appendix A |
| Dust or particulate collectors that vent directly indoors in workspace (See IA1) | 3 | 0.03 PM | Regulation 1.02, Appendix A; See Note 7 |
| Cold solvent parts cleaners equipped with a functional secondary reservoir (See IA2) | 1 | 0.01 VOC | Regulation 1.02, Appendix A; See Note 7 |
| Process scrap conveying systems (See IA1) | 2 | 4.15 PM | Regulation 2.16, section 1.23.1.2; See Note 7 |
| Shot blast cabinet (See IA1) | 1 | 4.68 PM | Regulation 2.16, section 1.23.1.2; See Note 7 |

| Equipment | Qty. | PTE (ton/yr) | Regulation Basis |
|---|---|---|---|
| Heating boiler (See IA3) | 1 | 2.70 $NO_X$ | Regulation 1.02, Appendix A; See Note 7 |

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A, shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16, section 4.3.5.3.6.
6. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions or use Potential to Emit (PTE) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16, section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

## Equipment Not Regulated

| Emission Point | Description |
|---|---|
| Glue tanks | One (1) glue storage tank (8,000 gallon) and three (3) mixing day tanks (500 gallons)[15] |

[15] The glue room contains one storage tank (8,000 gallons) and three mixing day tanks (500 gallons). The glue currently stored in this tank has 0.00% VOC by weight, therefore Regulation 7.12 does not apply. If the source wants to store glue which contains VOC in the storage tank, then a permit application must be submitted to the District and Regulation 7.12 conditions will be applied. Additionally, the mixing day tanks will be evaluated to determine the appropriate VOC regulation applicability.

## Emission Unit IA1: Particulate Emission Points[16]

### Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 7.08 | Standards of Performance for New Process Operations | 1 through 4 |

### Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|---|---|---|---|---|---|
| E-17 | One (1) woodshop | Pre-1997 | 7.08 | N/A | N/A |
| E-18 | Three (3) dust collectors | | 7.08 | N/A | N/A |
| E-19 | Two (2) process scrap conveying systems | | 7.08 | N/A | N/A |
| E-20 | One (1) shot blast cabinet | | 7.08 | IAC-20 | IAC-20 |

### Control Devices

| Control ID | Description | Control Efficiency |
|---|---|---|
| IAC-20 | Shot blast cabinet filters | 90% |

[16] No TACs emitted from this equipment.

## IA1 Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. Opacity**

i. The owner or operator shall not allow visible emissions to equal or exceed 20% opacity. [Regulation 7.08, section 3.1.1]

**b. PM**

i. The owner or operator shall not allow PM emissions to exceed 2.87 lb/hr from E-17 based on actual operating hours in a calendar day.[17]
[Regulation 7.08, section 3.1.2]

ii. The owner or operator shall not allow PM emissions to exceed 2.34 lb/hr from E-18 through E-20 based on actual operating hours in a calendar day.[17]
[Regulation 7.08, section 3.1.2]

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

**a. Opacity**

i. The owner or operator shall, monthly, conduct a one-minute visible emissions survey, of the emission points (E-17, E-18, E-19, and E-20). No more than four emission points shall be observed simultaneously. The opacity surveys can be performed on the building exhaust points if the process is inside an enclosure.

ii. At emission points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9, in accordance with 40 CFR Part 60, Appendix A, within 24 hours of the initial observation.

[17] A one-time compliance demonstration was performed for PM and the standard should be met uncontrolled.

iii. The owner or operator shall maintain records, monthly, of the results of all visible emissions surveys and tests. Records of the results of any visible emissions survey shall include the date of the survey, the name of the person conducting the survey, whether or not visible emissions were observed, and what if any corrective action was performed. If an emission point is not being operated during a given month, then no visible emission survey needs to be performed and a negative declaration shall be entered in the record.

**b. PM**

i. There is no monitoring and record keeping requirement for this pollutant.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

**a. Opacity**

i. Any deviation from the requirement to perform monthly visible emission surveys or Method 9 determinations;

ii. Any deviation from the requirement to record the results of each VE survey and Method 9 determination performed;

iii. The number, date, and time of each VE survey where visible emissions were observed, and the results of the Method 9 determination performed;

iv. Identification of all periods of exceeding an opacity standard; and

v. Description of any corrective action taken for each exceedance of the opacity standard.

**b. PM**

i. There are no compliance reporting requirements for this equipment.

## Emission Unit IA2: Parts Washer

### Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 6.18 | Standards of Performance for Solvent Metal Cleaning Equipment | 1 through 4 |

### Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|---|---|---|---|---|---|
| E-21 | One (1) Parts washer with secondary reservoir (35 gallons) and a surface opening two inches in diameter that contains non-HAP/non-TAC solvent cleaner. | 2003 | 6.18 | N/A | N/A |

### Control Devices

There are no control devices associated with Emission Unit IA2.

## IA2 Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. VOC**

i. The owner or operator of Emission Point E-21 shall install, maintain, and operate the control equipment as follows: [Regulation 6.18, section 4]

(1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. [Regulation 6.18, section 4.1.1]

(2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. [Regulation 6.18, section 4.1.2]

(3) A permanent, conspicuous label summarizing the operating requirements shall be installed on or near the cold cleaner. [Regulation 6.18, section 4.1.3]

(4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner.
[Regulation 6.18, section 4.1.4]

(5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner.
[Regulation 6.18, section 4.1.6]

(6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks.
[Regulation 6.18, section 4.1.8]

ii. The owner or operator shall observe, at all times, the following operating requirements: [Regulation 6.18, section 4.2]

(1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. [Regulation 6.18, section 4.2.1]

(2) The solvent level in the cold cleaner shall not exceed the fill line. [Regulation 6.18, section 4.2.2]

(3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. [Regulation 6.18, section 4.2.3]

(4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses.
[Regulation 6.18, section 4.2.4]

(5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner.
[Regulation 6.18, section 4.2.5]

(6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. [Regulation 6.18, section 4.2.6]

(7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner.
[Regulation 6.18, section 4.2.7]

iii. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). [Regulation 6.18, section 4.3.2]

iv. See Plantwide Requirements.

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

**a. VOC**

i. For Emission Point E-21:

(1) The owner or operator shall maintain records that include the following for each purchase: [Regulation 6.18, section 4.4.2]

(a) The name and address of the solvent supplier,

(b) The date of the purchase,

(c) The type of the solvent, and

(d) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

(2) All records required shall be retained for 5 years and made available to the District upon request. [Regulation 6.18, section 4.4.3]

ii. See Plantwide Requirements.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

**a. VOC**

i. For Emission Point E-21: There are no routine compliance reporting requirements for Regulation 6.18.

ii. See Plantwide Requirements.

## Emission Unit IA3: Heating Boiler

### Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 7.06 | Standards of Performance for New Indirect Heat Exchangers | 1 through 5 |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|---|
| **Regulation** | **Title** | **Applicable Sections** |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant | 1 through 5 |
| 5.23 | Categories of Toxic Air Contaminants | 1 through 6 |

### Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|---|---|---|---|---|---|
| E-24 | One (1) natural gas-fired boiler. [18]<br>Make Sellers, model #15SR.<br>Heat input 6.277 MMBtu/hr | 2021 | STAR, 7.06 | N/A | S-19 |

### Control Devices

There are no control devices associated with Emission Unit IA3.

[18] LLFlex has requested to be classified as an area source of HAPs, and therefore the source does not meet the applicability according to 40 CFR §63.7485, therefore the source is not subject to 40 CFR 63 DDDDD. Additionally, the source is not subject to 40 CFR 63 JJJJJJ in accordance with 40 CFR §63.11195(e), based on the definition of gas-fired boiler.

## IA3 Specific Conditions

**S1. Standards**
[Regulation 2.16, section 4.1.1]

**a. HAP**

i. See Plantwide Requirements.

**b. Opacity**

i. The owner or operator shall not cause to be discharged into the atmosphere from any affected facility particulate matter emissions which exhibit greater than 20% opacity.[19] [Regulation 7.06, section 3.2]

**c. PM**

i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility particulate matter in excess of 0.56 pounds per million BTU actual total heat input.[20] [Regulation 7.06, section 4.1.1]

**d. $SO_2$**

i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain sulfur dioxide in excess of 1.0 pounds per million BTU actual total heat input for combustion of gaseous fuels.[20] [Regulation 7.06, section 5.1.1]

**e. TAC**

i. See Plantwide Requirements.[21]

[19] It has been determined that using a natural gas fired boiler should inherently meet the 20% opacity standard. Therefore, the company is not required to perform periodic monitoring to demonstrate compliance with the opacity standard.

[20] A one-time PM and $SO_2$ compliance demonstration has been performed for the boiler, using AP-42 emission factors and combusting natural gas, and the pounds per million BTU emission standards cannot be exceeded uncontrolled. Therefore, there are no monitoring, record keeping, and reporting requirements for this boiler with respect to PM and $SO_2$ emission limits.

[21] The TAC emissions from the combustion of natural gas are "*de minimis*" emissions pursuant to District Regulations 5.21, Section 2.7. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include other TAC emissions from a process or process equipment which are not the products of the combustion of natural gas.

**S2. Monitoring and Record Keeping**
[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

The owner or operator shall maintain the following records for a minimum of five years and make the records readily available to the District upon request.

**a. HAP**

i. See Plantwide Requirements.

**b. Opacity**

i. There are no monitoring or record keeping requirements for Opacity compliance.

**c. PM**

i. There are no monitoring or record keeping requirements for PM compliance.

**d. $SO_2$**

i. There are no monitoring or record keeping requirements for $SO_2$ compliance.

**e. TAC**

i. See Plantwide Requirements.

**S3. Reporting**
[Regulation 2.16, section 4.1.1]

The owner or operator shall report the following information, as required by General Condition G14:

**a. HAP**

i. See Plantwide Requirements.

**b. Opacity**

i. There are no compliance reporting requirements for this equipment.

**c. PM**

i. There are no compliance reporting requirements for this equipment.

**d. $SO_2$**

i. There are no compliance reporting requirements for this equipment.

**e. TAC**

i. See Plantwide Requirements.

## Attachment A - Default Emission Factors, Calculation Methodologies, & Stack Tests

Generally, emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc) or hours of operation of the equipment by the appropriate emission factor and accounting for any control devices unless otherwise approved in writing by the District.

| Equipment | Emission Point | Pollutant | Emission Factor | Determination Method |
|---|---|---|---|---|
| Laminator #12<br>Laminator #6<br>Laminator #7<br>Laminator #8<br>Laminator #9- Coating Station #1<br>Laminator #9- Coating Station #2<br>Laminator #10- Coating Station #1<br>Laminator #10-Coating Station #2<br>Laminator #11<br>Laminator #14<br>Portable Totes | E-1<br>E-2<br>E-3<br>E-4<br>E-5<br>E-16<br>E-6<br>E-10<br>E-7<br>E-8<br>E-13B | VOC | MSDS/SDS content | Mass balance calculation; see note 4 |
| | | HAPs | MSDS/SDS content | Mass balance calculation; see note 4 |
| Boiler (IA)<br>Oven #12<br>Oven #6<br>Oven #7<br>Oven #8<br>#9 Oven #1<br>#9 Oven #2<br>#10 Oven #1<br>#10 Oven #2<br>Oven #11<br>Oven #14<br>Oven #15 | E-24<br>E-1a<br>E-2a<br>E-3a<br>E-4a<br>E-5a<br>E-16a<br>E-6a<br>E-10a<br>E-7a<br>E-8a<br>E-9a | NOx | 100 lb/MMcf | AP-42 section 1.4, Table 1.4-1 through 1.4-4 |
| | | $SO_2$ | 0.6 lb/MMcf | |
| | | PM | 7.6 lb/MMcf | |
| | | VOC | 5.5 lb/MMcf | |
| | | CO | 84 lb/MMcf | |
| Tank #3 | E-11 | VOC | AP-42, Section 7.1 | |
| Tank #2 | E-12 | | | |
| Tank #1 | E-13 | | | |
| Tank #4 | E-13A | | | |
| Woodshop | E-17 | PM | 1.89% of material removed $PM_{10}$ | Estimating Emissions from Generation and Combustion of 'Waste Wood', July 15, 1998 |
| Various dust collectors | E-18 | PM | | |
| Process scrap conveying systems | E-19 | PM | 0.25% of PM of total tonnage processed | Source estimate |
| Shot blast cabinet | E-20 | PM | See note 3 | See note 3 |
| Parts washer | E-21 | VOC | MSDS/SDS content | Mass balance calculation |

| Control Devices | | | |
|---|---|---|---|
| **ID** | **Description** | **Efficiency** | **Basis** |
| C-2 | Catalytic Oxidizer, with 600°F minimum catalyst bed inlet temperature | 98.1% | Capture and control performance test was conducted on July 25, 2017 |

| Control Devices | | | |
|---|---|---|---|
| **ID** | **Description** | **Efficiency** | **Basis** |
| IAC-20 | Shot blast filters | 90% | APCD default control efficiency |

Note:

1. Options for control efficiency determination:
   - Option 1: Use District pre-approved control efficiency
   - Option 2: Submit a signature guarantee from the control device manufacture stating the control device efficiency
   - Option 3: Perform stack test.

2. Until the District receives a signature guarantee from the control device manufacturer stating the control device efficiency is higher (Option 2), or an approved stack test (Option 3), the pre-approved efficiency (Option 1) will be used in all calculations to demonstrate compliance with applicable standards and calculations for emission inventory.

3. $PM/PM_{10}$ actual emissions from the Shot blast cabinet equipment shall be calculated according to the following methodology unless another method is approved in writing by the District:

   Uncontrolled
   PM(ton) = (operating time, hr) (capacity, 165 lb abrasive/hr) (emission factor, 27 lb/ 1000 lb abrasive)/ (2000, lb/ton)
   $PM_{10}$(ton) = (operating time, hr) (capacity, 165 lb abrasive/hr) (emission factor, 13 lb/ 1000 lb abrasive)/ (2000, lb/ton)

   Controlled
   PM(ton) = (operating time, hr) (capacity, 165 lb abrasive/hr) (emission factor, 27 lb/ 1000 lb abrasive) (1 – control efficiency, 90% for a filter)/ (2000, lb/ton)
   $PM_{10}$(ton) = (operating time, hr) (capacity, 165 lb abrasive/hr) (emission factor, 13 lb/ 1000 lb abrasive) (1 – control efficiency, 90% for a filter)/ (2000, lb/ton)

   "XX" is the maximum capacity of the blast equipment.

4. Uncontrolled VOC emissions shall be calculated according to the following methodology unless another method is approved in writing by the District:

   VOC (lb) = Coating used (gal) × Density (lb/gal) × VOC content (%)
   or
   VOC (lb) = Coating used (gal) × VOC content (lb/gal)

   Controlled VOC emissions shall be calculated according to the following methodology unless another method is approved in writing by the District:

   VOC (lb) = Coating used (gal) × Density (lb/gal) × VOC content (%) ×
   [1 – (Capture Efficiency (%)/100 × Destruction Efficiency (%)/100)]

or

VOC (lb) = Coating used (gal) × VOC content (lb/gal) ×
[1 – (Capture Efficiency(%)/100 × Destruction Efficiency (%)/100)]

An example of a methodology to determine compliance is as follows unless another method is approved in writing by the District:

$$\frac{\text{Total Solvent Based Controlled VOC Emissions (lbs)}}{\text{VOC Net Input into the affected facility (lbs)}} \; x \; 100\% < 35\%$$

## Attachment B - Protocol Checklist for a Performance Test

### A complete protocol must include the following information

1. Facility name, location, and Plant ID number.
2. Responsible Official and environmental contact names.
3. Permit numbers that are requiring the test to be conducted.
4. Test methods to be used (*i.e.* EPA Method 1, 2, 3, 4, and 5).
5. Alternative test methods or description of modifications to the test methods to be used.
6. Purpose of the test including equipment and pollutant to be tested. (The purpose may be described in the permit that requires the test to be conducted or it may be to show compliance with a federal regulation or emission standard.)
7. Tentative test dates. (These may change but final notice is required at least 10 days in advance of the actual test dates in order to arrange for observation.)
8. Maximum rated production capacity of the system.
9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits) and justification of the planned production rate, if less than the maximum rate.
10. Method to be used for determining rate of production during the performance test.
11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance.
12. Description of normal operation cycles, if applicable.
13. Discussion of operating conditions that tend to cause worse case emissions. This is especially important to clarify if worst case emissions do not result from the maximum production rate.
14. Process flow diagram.
15. The type and manufacturer of the control equipment, if any.
16. The process and/or control equipment parameters to be monitored and recorded during the performance test. These parameters may include pressure drops, flow rates, pH, temperature, *etc*. The values achieved during the test may be required during subsequent operations to describe the operating parameters that are indicative of good operating performance.
17. How quality assurance and accuracy of the data will be maintained, including sample identification and chain-of-custody procedures, audit sample provider, and number of audit samples to be used, if applicable.
18. Diameter of the pipe, duct, stack, or flue to be tested.
19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet.
20. The number of traverse points to be tested for the outlet and the inlet if required, using Method 1 in Appendix A-1 to 40 CFR Part 60.

**The Stack Test Review fee must be submitted with each stack test protocol.**

The current fee is listed on the APCD website (louisvilleky.gov/APCD)

# Attachment C – Determination of Benchmark Ambient Concentration (BAC)

Category _____ Number _____

Compound name _____ CAS No. _____

Molecular weight _____

$BAC_C$ = _____ µg/m$^3$, annual $BAC_{NC}$ = _____ µg/m$^3$, _____ (avg period)

*de minimis* _____ lb/hr; _____ lb/_____; _____ lb/year

**I. Carcinogen Risk - $BAC_C$** (annual averaging period) Carcinogen ☐ YES ☐ NO

1. ☐ IRIS $10^{-6}$ risk = _____ µg/m$^3$ URE = _____ (µg/m$^3$)$^{-1}$ Date _____
2. ☐ Cal $10^{-6}$ risk = _____ µg/m$^3$ IUR = _____ (µg/m$^3$)$^{-1}$ Date _____
3. ☐ Mich $10^{-6}$ risk = _____ µg/m$^3$ Date _____
4. ☐ NTP Part A ☐ YES ☐ NO Part B ☐ YES ☐ NO
5. ☐ IARC Group 1 ☐ YES ☐ NO Group 2A ☐ YES ☐ NO Group 2B ☐ YES ☐ NO
6. ☐ ATSDR
7. ☐ Sec. 3.3.4 Method # _____ $10^{-6}$ risk = _____ µg/m$^3$ Date _____
8. ☐ Default 0.0004 µg/m$^3$

**II. Chronic Noncancer Risk - $BAC_{NC}$** (averaging period as specified)

1. ☐ IRIS RfC = _____ µg/m$^3$, annual Date _____
2. ☐ Cal REL = _____ µg/m$^3$, annual Date _____
3. ☐ IRIS [1] RfD = _____ µg/kg/day × (70/20) = _____ µg/m$^3$, annual Date _____
4. ☐ Mich ITSL = _____ µg/m$^3$, _____ averaging period Date _____
5. ☐ TLV NIOSH = _____ µg/m$^3$ × 0.01 = _____ µg/m$^3$, 8-hour Date _____
6. ☐ RTECS [1] _____ = _____ µg/m$^3$, annual Date _____
   (describe calculation from Reg 5.20, sections 4.6 - 4.10)
7. ☐ Default 0.004 µg/m$^3$

[1] To use data based upon an oral route of exposure, the District must make an affirmative determination that data are not available to indicate that oral-route to inhalation-route extrapolation is inappropriate.

**III. *De minimis calculations***

1. ☐ Carcinogen $BAC_C$ _____ µg/m$^3$ × 0.54 = _____ lb/hour
   $BAC_C$ _____ µg/m$^3$ × 480 = _____ lb/year

2. ☐ Chronic Noncancer Risk _____ (averaging period)
   $BAC_{NC}$ _____ µg/m$^3$ × F factor = _____ lb/(avg period)

| BAC averaging period | F factor for avg period | | | |
|---|---|---|---|---|
| | Annual | 24 hour | 8 hour | 1 hour |
| Annual | 480 | | | 0.54 |
| 24 hours | | 0.12 | | 0.05 |
| 8 hours | | | 0.02 | 0.02 |
| 1 hour | | | | 0.001 |

[Regulation 5.22, table 1]

Prepared by _____ Date _____